



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0378; Project Identifier 2017-SW-122-AD; Amendment 39-21576; AD 2021-11-14]

RIN 2120-AA64

Airworthiness Directives; Leonardo S.p.a. Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule; request for comments.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Leonardo S.p.a. Model AW169 helicopters. This AD was prompted by reports of failed nose landing gear (NLG) retraction actuators during the acceptance test procedures on the ground on the final assembly line. This AD requires depending on the helicopter configuration, various modifications, installation checks, inspections of the NLG and main landing gear (MLG) retraction actuators and of the plungers of the NLG and MLG up down lock actuators, and corrective actions if necessary. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD becomes effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain document listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The FAA must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43

and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.
- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this final rule, contact Leonardo S.p.A. Helicopters, Emanuele Bufano, Head of Airworthiness, Viale G.Agusta 520, 21017 C.Costa di Samarate (Va) Italy; telephone +39-0331-225074; fax +39-0331-229046; or at <https://www.leonardocompany.com/en/home>. You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110. It is also available at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0378.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0378; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD, any comments received, and other information. The street address for Docket Operations is listed above.

FOR FURTHER INFORMATION CONTACT: Anthony Kenward, Aerospace Engineer, AIR-7F1, Fort Worth ACO Branch, FAA, 10101 Hillwood Parkway, Fort

Worth, TX 78101; telephone (817) 222-5152; email Anthony.Kenward@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2017-0164, dated September 4, 2017 (EASA AD 2017-0164), to correct an unsafe condition for certain Leonardo S.p.a. Model AW169 helicopters. The EASA advises that there were reports of failed NLG retraction actuators during the acceptance test procedures on the ground on the final assembly line. The EASA stated the NLG got stuck at approximately a 45° angle (half of the full stroke) regardless of the selected extension mode (normal or emergency). Investigation revealed that excessive friction inside the NLG retraction actuator caused internal damage, resulting in mechanical jam of the actuator rotary shaft. The EASA advised that due to similarity of design, the same failure mode can affect the MLG retraction actuators. This condition, if not addressed, could result in a partially locked or unlocked NLG or MLG upon landing, possibly resulting in damage to the helicopter and injury to the occupants.

Accordingly, the EASA AD requires, depending on the helicopter configuration, various modifications, installation checks, inspections of the plungers of the NLG and MLG up down lock actuators, and corrective actions if necessary.

FAA's Determination

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the State of Design Authority, the FAA has been notified of the unsafe condition described in the MCAI referenced above. The FAA is issuing this AD after evaluating all pertinent information and determining that the unsafe condition exists and is likely to exist or develop on other products of the same type design.

Related Service Information Under 1 CFR Part 51

The FAA reviewed Leonardo Helicopters Alert Service Bulletin 169-023, Revision B, dated April 16, 2018 (ASB 169-023, Revision B). This service information specifies procedures for, depending on the helicopter configuration, various modifications, installation checks (which include measurements), inspections of the plungers of the NLG and MLG up down lock actuators, and corrective actions if necessary. The modifications include replacing the actuators, installing enhanced landing gear retracting actuators, modifying the landing gear actuator control box, improving the landing gear proximity switch, and doing checks and measurements. Corrective actions include replacing the NLG and MLG lock support buffer, reinstalling the NLG and MLG retracting electrical actuator, shimming gaps, adjusting the position of the NLG retracting lever, applying lubricant, installing a pin, replacing washers, and reinstalling the NLG assembly.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

AD Requirements

This AD requires accomplishing the actions specified in the service information already described, except as discussed under “Differences Between this AD and the MCAI.”

Differences Between this AD and the MCAI

EASA AD 2017-0164 requires modifications and installation checks within 200 hours time-in-service (TIS) or 6 months, whichever occurs first; this AD requires those actions within 200 hours TIS.

EASA AD 2017-0164 requires, for certain helicopters, an inspection of the plungers of the NLG and MLG up down lock actuators within 50 hours TIS or 30 days, whichever occurs first; this AD requires that action within 30 days.

Justification for Immediate Adoption and Determination of the Effective Date

Section 553(b)(3)(B) of the Administrative Procedure Act (APA) (5 U.S.C. 551 *et seq.*) authorizes agencies to dispense with notice and comment procedures for rules when the agency, for “good cause,” finds that those procedures are “impracticable, unnecessary, or contrary to the public interest.” Under this section, an agency, upon finding good cause, may issue a final rule without providing notice and seeking comment prior to issuance. Further, section 553(d) of the APA authorizes agencies to make rules effective in less than thirty days, upon a finding of good cause.

There is one helicopter with this type certificate on the U.S. Register. The FAA has confirmed that the identified unsafe condition has been addressed on that helicopter. Accordingly, notice and opportunity for prior public comment are unnecessary, pursuant to 5 U.S.C. 553(b)(3)(B).

In addition, for the foregoing reason(s), the FAA finds that good cause exists pursuant to 5 U.S.C. 553(d) for making this amendment effective in less than 30 days.

Comments Invited

The FAA invites you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under ADDRESSES. Include “Docket No. FAA-2021-0378; Project Identifier 2017-SW-122-AD” at the beginning of your comments. The most helpful comments reference a specific portion of the final rule, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this final rule because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all comments received, without change, to <https://www.regulations.gov>, including any

personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this final rule.

Confidential Business Information

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this AD contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this AD, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this AD. Submissions containing CBI should be sent to Anthony Kenward, Aerospace Engineer, AIR-7F1, Fort Worth ACO Branch, FAA, 10101 Hillwood Parkway, Fort Worth, TX 78101; telephone (817) 222-5152; email Anthony.Kenward@faa.gov. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

Regulatory Flexibility Act

The requirements of the Regulatory Flexibility Act (RFA) do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because the FAA has determined that it has good cause to adopt this rule without prior notice and comment, RFA analysis is not required.

Costs of Compliance

Currently, there are no affected U.S.-registered helicopters. As stated previously, there is one helicopter on the U.S. Register; however, the required actions have already been accomplished on that helicopter. If an affected helicopter is imported and placed on

the U.S. Register in the future, the FAA provides the following cost estimates to comply with this AD:

Estimated costs for required actions

| Labor cost | Parts cost | Cost per product |
|---|-------------------|-------------------------|
| Up to 147 work-hours X \$85 per hour = \$12,495 | * | \$12,495 |

* The FAA has received no definitive data that would enable the agency to provide cost estimates for the parts cost of the required actions specified in this AD.

The FAA estimates the following costs to do any necessary on-condition actions that would be required based on the results of any required actions. The FAA has no way of determining the number of helicopters that might need these on-condition actions:

Estimated costs of on-condition actions

| Labor cost | Parts cost | Cost per product |
|--------------------------------------|-------------------|-------------------------|
| 8 work-hours X \$85 per hour = \$680 | Negligible | \$680 |

According to the manufacturer, some or all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected operators. The FAA does not control warranty coverage for affected operators. As a result, the FAA has included all known costs in the cost estimate.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds

necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866, and
- (2) Will not affect intrastate aviation in Alaska.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive:

2021-11-14 Leonardo S.p.a.: Amendment 39-21576; Docket No. FAA-2021-0378;
Project Identifier 2017-SW-122-AD.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Leonardo S.p.a. Model AW169 helicopters, certificated in any category, identified in paragraphs (c)(1) and (2) of this AD.

(1) Helicopters having serial number 69007, 69009, 69011, 69013, 69014, 69015, 69017, 69018, 69020, 69021, 69022, 69023, 69024, 69025, 69027, 69028, 69031, 69032, 69041, 69042, 69043, 69044, 69049 and 69051.

(2) All helicopters equipped with retractable landing gear (LG) system part number (P/N) 6F3200F00311 or P/N 6F3200F00411.

(d) Subject

Joint Aircraft Service Component (JASC) Code: 3233, Landing Gear Actuator.

(e) Unsafe Condition

This AD was prompted by reports of failed nose landing gear (NLG) retraction actuators during the acceptance test procedures on the ground on the final assembly line. The FAA is issuing this AD to address failed NLG and main landing gear (MLG) retraction actuators. The unsafe condition, if not addressed, could result in a partially locked or unlocked NLG or MLG upon landing, possibly resulting in damage to the helicopter and injury to the occupants.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Modifications

Within 200 hours time-in-service (TIS) after the effective date of this AD, do the applicable actions specified in paragraphs (g)(1) through (5) of this AD, in accordance with the applicable part of the Accomplishment Instructions of Leonardo Helicopters

Alert Service Bulletin 169-023, Revision B, dated April 16, 2018 (ASB 169-023, Revision B), except as required by paragraph (k) of this AD.

(1) For helicopters having S/N 69011 and S/N 69017 that are not equipped with retractable LG system P/N 6F3200F00411 (enhanced NLG retracting actuator P/N 6F3230V00532 and enhanced MLG retracting actuators P/N 6F3230V00832 and P/N 6F3230V01032): Modify the helicopter (which includes replacing the actuators and doing checks and measurements), as specified in Part I of ASB 169-023, Revision B.

(2) For helicopters having S/N 69007, S/N 69015, S/N 69018, and S/N 69022 that are not equipped with retractable LG system P/N 6F3200F00411 (enhanced NLG retracting actuator P/N 6F3230V00532 and enhanced MLG retracting actuators P/N 6F3230V00832 and P/N 6F3230V01032): Modify the helicopter (which includes installing enhanced landing gear retracting actuators and doing checks and measurements), as specified in Part II of ASB 169-023, Revision B.

(3) For helicopters having S/N 69032, S/N 69041, and S/N 69051 that are not equipped with retractable LG system P/N 6F3200F00411 (enhanced NLG retracting actuator P/N 6F3230V00532 and enhanced MLG retracting actuators P/N F3230V00832 and P/N 6F3230V01032): Modify the helicopter (which includes installing enhanced landing gear retracting actuators and doing checks and measurements), as specified in Part III of ASB 169-023, Revision B.

(4) For helicopters having S/N 69007, S/N 69009, S/N 69011, S/N 69013, S/N 69014, S/N 69015, S/N 69017, S/N 69018, S/N 69020, S/N 69021, S/N 69022, S/N 69023, S/N 69024, S/N 69027, S/N 69032, S/N 69041, and S/N 69051: Modify the helicopter (which includes modifying the landing gear actuator control box), as specified in Part IV of ASB 169-023, Revision B.

(5) For helicopters having S/N 69007, S/N 69009, S/N 69011, S/N 69013, S/N 69014, S/N 69015, S/N 69017, S/N 69018, S/N 69020, S/N 69021, S/N 69022,

S/N 69023, S/N 69024, S/N 69025, S/N 69027, S/N 69028, S/N 69031, S/N 69032, S/N 69041, S/N 69042, S/N 69043, S/N 69044, and S/N 69051: Modify the helicopter (which includes improving the landing gear proximity switch and doing checks and measurements), as specified in Part V of ASB 169-023, Revision B.

(h) Installation Checks

For helicopters having S/N 69009, S/N 69013, S/N 69014, S/N 69020, S/N 69021, S/N 69023, S/N 69024, S/N 69025, S/N 69027, S/N 69028, S/N 69031, S/N 69042, S/N 69043, S/N 69044, and S/N 69049 that are equipped with both retractable LG system P/N 6F3200F00311 and P/N 6F3200F00411: Within 200 hours TIS after the effective date of this AD, accomplish installation checks (which include measurements), in accordance with Part VI of the Accomplishment Instructions of ASB 169-023, Revision B, except as required by paragraph (k) of this AD.

(i) NLG and MLG Up Down Lock Actuator Inspection

For helicopters equipped with retractable LG system P/N 6F3200F00311 or P/N 6F3200F00411: At the time specified in paragraph (i)(1) or (2) of this AD, whichever occurs first, inspect the plungers of the NLG and MLG up down lock actuators, in accordance with Part VII of the Accomplishment Instructions of ASB 169-023, Revision B, except as required by paragraph (k) of this AD.

(1) Within 30 days after the effective date of this AD.

(2) Concurrently with the modifications required by paragraphs (g)(1), (2), and (3) of this AD, as applicable.

(j) Corrective Actions

(1) If, during any modification required by paragraph (g)(1), (2), (3), or (5) of this AD, or during any installation check required by paragraph (h) of this AD, any discrepancy is detected, before further flight, accomplish the applicable corrective actions, in accordance with the Accomplishment Instructions of ASB 169-023,

Revision B, except as required by paragraph (k) of this AD. For this AD, discrepancies include gaps between parts that are not within tolerances, improperly aligned rotational axis of certain parts, non-parallel lever for certain parts, a certain pin is not installed on the MLGs, and incorrect thickness of certain washers.

(2) If, during any inspection required by paragraph (i) of this AD, corrosion is detected, before further flight, accomplish the applicable corrective action and apply corrosion inhibitor on the plungers of the NLG and MLG up down lock actuators, in accordance with Part VII of the Accomplishment Instructions of ASB 169-023, Revision B, except as required by paragraph (k) of this AD.

(3) If, during any inspection required by paragraph (i) of this AD, no corrosion is detected, before further flight, apply corrosion inhibitor on the plungers of the NLG and MLG up down lock actuators, in accordance with Part VII of the Accomplishment Instructions of ASB 169-023, Revision B, except as required by paragraph (k) of this AD.

(k) Service Information Exceptions

(1) Where ASB 169-023, Revision B, specifies to discard certain parts, this AD requires removing those parts from service.

(2) Where ASB 169-023, Revision B, specifies to contact the manufacturer, before further flight, repair using a method approved by the Manager, International Validation Branch, FAA. For a repair method to be approved by the Manager, International Validation Branch, as required by this paragraph, the Manager's approval letter must specifically refer to this AD.

(3) Where ASB 169-023, Revision B, specifies to return certain parts, this AD does not include that requirement.

(l) No Reporting Requirement

Although ASB 169-023, Revision B, specifies to submit certain information to the manufacturer, this AD does not include that requirement.

(m) Credit for Previous Actions

(1) This paragraph provides credit for actions required by paragraphs (g), (h), (i), and (j) of this AD, if those actions were performed before the effective date of this AD using Leonardo Helicopters Alert Service Bulletin 169-023, dated May 31, 2017, provided that, for helicopters on which Part V of that service information was accomplished, the adhesive fixing of the NLG and MLG support buffers is replaced within 3 months after the effective date of this AD. The replacement must be done in accordance with steps 1., 2., 8.3, 8.4, 18., and 20. of Part V of the Accomplishment Instructions of ASB 169-023, Revision B, except as specified in paragraph (k) of this AD.

(2) This paragraph provides credit for actions required by paragraphs (g), (h), (i), and (j) of this AD, if those actions were performed before the effective date of this AD using Leonardo Helicopters Alert Service Bulletin 169-023, Revision A, dated September 1, 2017.

(n) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (o)(1) of this AD. Information may be emailed to: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(o) Related Information

(1) For more information about this AD, contact Anthony Kenward, Aerospace Engineer, AIR-7F1, Fort Worth ACO Branch, FAA, 10101 Hillwood Parkway, Fort Worth, TX 78101; telephone (817) 222-5152; email Anthony.Kenward@faa.gov.

(2) The subject of this AD is addressed in European Aviation Safety Agency (now European Union Aviation Safety Agency) (EASA) AD 2017-0164, dated September 4, 2017. You may view the EASA AD on the Internet at <https://www.regulations.gov> in the AD Docket.

(p) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Leonardo Helicopters Alert Service Bulletin 169-023, Revision B, dated April 16, 2018.

(ii) [Reserved]

(3) For service information identified in this AD, contact Leonardo S.p.A. Helicopters, Emanuele Bufano, Head of Airworthiness, Viale G.Agusta 520, 21017 C.Costa di Samarate (Va) Italy; telephone +39-0331-225074; fax +39-0331-229046; or at <https://www.leonardocompany.com/en/home>.

(4) You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy., Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the

availability of this material at NARA, email: fedreg.legal@nara.gov, or go to:

<https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on May 19, 2021.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2021-11806 Filed: 6/4/2021 8:45 am; Publication Date: 6/7/2021]